

Proposed text for all 6 user guides on post processing results.

Potential insertion sites are at end of section 2, 3, or 4.

Potential Section title – “Postprocessing Calculator Results to incorporate site-specific MCNP Results for ACF, GSF, and F_{surf} Values.”

Nearly all of the exposure parameters in the screening level equations can be changed by using the site-specific option in the calculator. Further, many of the isotope-specific values (i.e., slope factors, dose coefficients, partition coefficients, and transfer factors for plants and animals) can be changed by using the user-provided option in the calculator. While many options are given for users to select site size, room dimensions, receptor positions, and building materials to estimate exposure and shielding, it may be necessary to derive a “factor” specific to a particular site using tools like MCNP. The following is a brief description of how to postprocess calculator results. All variables in the ingestion and inhalation equations can be changed in the calculator itself; only the external exposure route could require post processing.

The calculator offers the option to export results in a spreadsheet format. Using the spreadsheet, the “factor” supplied by the calculator can be substituted with a site-specific factor supplied by the user. The procedure is relatively straight forward as all the “factors” are in the denominator of the screening level equations. Simply multiply the screening level by the ratio of the default “factor” to the site-specific factor.

This general process does but work, but further steps may be necessary and please consider the following:

- If adjusting a factor in the external exposure route, the total screening level needs to be recalculated also using the inverse sum of reciprocals.
- If adjusting a factor in parentheses, such as a resident GSF_o, then more postprocessing is required.
- When adjusting a screening level calculated by the secular equilibrium option, “factors” for all the progeny need to be calculated and totaled using the inverse sum of reciprocals.